Reply to Office action of November 17, 2009

Attorney Docket No. P18224-US1

EUS/GJ/P/10-1032

Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method in a communication system, comprising the

steps of:

sending at a first radio network entity a transmission power control signal to a

mobile radio to control a power level at which the mobile radio transmits data units over

the communications channel based on a target value;

detecting at the first radio network entity one or more errors in one or more data

units received from the mobile radio and requesting retransmission of one or more data

units; and,

providing information associated with the requested retransmission to a second

radio network entity for generating a revised target value based on the received

information in the second radio network entity.

2. (Original) The method in claim 1, wherein the provided information includes

information relating to a number of data unit transmission attempts over the

communications channel.

(Original) The method in claim 1, wherein the provided information includes

information indicating one or more data units received in which one or more errors was

detected or one or more data units was not received.

4. (Original) The method in claim 3, wherein the provided information includes

one or both of cyclic redundancy check information and quality estimate information for

data units transmitted over the communications channel.

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5. (Original) The method in claim 4, wherein the communication is a diversity

handover communication including two or more handover links between two or more

base stations and the mobile radio, the method further comprising:

the second radio network entity performing diversity combining of one or more

data units received over the two or more handover links based on one or both

of the cyclic redundancy check information and the quality estimate information.

6. (Currently Amended) The method in claim 1, further comprising the steps

of:

increasing the target value if the received information reveals an increase in

requested retransmissions, and

decreasing the target value if the received information reveals a decrease in

requested retransmissions,

wherein an increased target value causes the first radio network entity to send

one or more increase transmission power control signals to the mobile radio, and a

decreased target value causes the first radio network entity to send one or more

decrease transmission power control signals to the mobile radio.

7. (Original) The method in claim 1, wherein the target value is a signal-to-noise

ratio or a signal-to-interference ratio.

8. (Original) The method in claim 1, wherein the detecting includes detecting

signal quality information and cyclic redundancy check information for data units

received over the communications channel.

9. (Original) The method in claim 1, wherein when the first radio network entity

detects a missing or erroneous data unit, the first radio network entity sends a negative

acknowledgement to the mobile radio and an error event indicator to the second radio

network entity.

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10. (Original) The method in claim 9, wherein the second radio network entity

ensures that error event indicators received from plural first entities for the same data

unit are only interpreted as one error event indicator.

11. The method in claim 9, wherein the second radio network entity (Original)

determines an actual data unit transmission failure rate for the communication using

one or more error event indicators and generates the revised target value to reduce a

difference between the actual data unit transmission failure rate and a desired data unit

transmission failure rate.

12. (Original) The method in claim 1, wherein when the first radio network entity

sends a bit map associated with the communication indicating a number of decoding

failures for one or more received data units to the second radio network entity.

13. The method in claim 12, wherein the second radio network entity (Original)

combines bit map information received from plural first entities for the same data unit.

14. (Original) The method in claim 1, wherein when the first radio network entity

processes one or more bit maps associated with the communication indicating a

number of decoding failures for one or more received data units and sends processed

information resulting from the processing to the second radio network entity, wherein

the processed information is less data than the one or more bit maps.

15. (Original) The method in claim 14, wherein the processed information

includes statistical information provided by the mobile radio or the first radio network

entity.

16. (Original) The method in claim 1, wherein the provided information includes

statistical information provided by the mobile radio.

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17. (Original) The method in claim 1, wherein the first and second radio network

entities are located in different radio network nodes.

18. (Original) The method in claim 1, wherein the first and second radio network

entities are located in a same radio network node.

19. (Original) The method in claim 18, wherein the second radio network entity

generates the revised target based on the received information and a new data indicator

(NDI) communicated by the mobile radio indicating whether a data unit is a new data

unit or a retransmitted data unit.

20. (Original) The method in claim 19, wherein the second radio network node is

a base station, the mobile radio communication is a soft handover communication

involving first and second base stations, and the NDI indicates a decoding result of the

data unit taking into account a data unit decoding at the first base station and a data unit

decoding at the second base station.

21-26. (Cancelled).

27. (Previously Presented) A radio network for communicating with a mobile

radio communication over a communications channel, comprising:

first means in a first radio network entity for sending a transmission power control

signal to the mobile radio to control a power level at which the mobile radio transmits

data units over the communications channel based on a target value;

second means in the first radio network entity for detecting one or more errors in

one or more data units received from the mobile radio and requesting retransmission of

one or more data units:

third means for providing information associated with the requested

retransmission to a second radio network entity; and,

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fourth means in the second radio network entity for generating a revised target

value based on the received information.

28. (Original) The radio network in claim 27, wherein the provided information

includes information relating to a number of data unit transmission attempts over the

communications channel.

29. (Original) The radio network in claim 27, wherein the provided information

includes one or both of cyclic redundancy check information and quality estimate

information for data units transmitted over the communications channel.

30. (Original) The radio network in claim 29, wherein the communication is a

diversity handover communication including two or more handover links between two or

more base stations and the mobile radio, further comprising:

means in the second radio network entity for performing diversity combining

one or more data units received over the two or more handover links based on one or

both of the cyclic redundancy check information and the quality estimate information.

31. (Original) The radio network in claim 27, the second radio network entity

further comprising:

means for increasing the target value if the received information reveals an

increase in requested retransmissions, and

means for decreasing the target value if the received information reveals a

decrease in requested retransmissions,

wherein an increased target value causes the first means to send one or more

increase transmission power control signals to the mobile radio, and a decreased target

value causes the first means to send one or more decrease transmission power control

signals to the mobile radio.

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32. (Original) The radio network in claim 27, wherein the target value is a signal

to noise ratio or a signal to interference ratio.

33. (Original) The radio network in claim 27, wherein the detecting includes

detecting signal quality information and cyclic redundancy check information for data

units received over the communications channel.

34. (Original) The radio network in claim 27, wherein when the second means

detects a missing or erroneous data unit, the first radio network entity includes means

for sending a negative acknowledgement to the mobile radio and an error event

indicator to the second radio network entity.

35. (Original) The radio network in claim 34, wherein the second radio network

entity includes means for ensuring that error event indicators received from plural first

entities for the same data unit are only interpreted as one error event indicator.

36. (Original) The radio network in claim 34, wherein the second radio network

entity includes means for determining an actual data unit transmission failure rate for

the communication using one or more error event indicators and for generating the

revised target value to reduce a difference between the actual data unit transmission

failure rate and a desired data unit transmission failure rate.

37. (Original) The radio network in claim 27, wherein when the first radio network

entity includes means for sending a bit map associated with the communication

indicating a number of decoding failures for one or more received data units to the

second radio network entity.

38. (Original) The radio network in claim 37, wherein the second radio network

entity includes means for combining bit map information received from plural first

entities for the same data unit.

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39. (Original) The radio network in claim 27, wherein when the first radio network

entity includes means for processing one or more bit maps associated with the

communication indicating a number of decoding failures for one or more received data

units and sending processed information resulting from the processing to the second

radio network entity, wherein the processed information is less data than the one or

more bit maps.

40. (Original) The radio network in claim 39, wherein the processed information

includes statistical information provided by the mobile radio or the first radio network

entity.

41. (Original) The radio network in claim 27, wherein the provided information

includes statistical information provided by the mobile radio.

42. (Original) The radio network in claim 27, wherein the first and second radio

network entities are located in a same radio network node.

43. (Original) The radio network in claim 42, wherein the second radio network

entity includes means for generating the revised target based on the received

information and on a new data indicator (NDI) communicated by the mobile radio

indicating whether a data unit is a new data unit or a retransmitted data unit.

44. (Original) The radio network in claim 43, wherein the first and second radio

network entities are located in a base station, the mobile radio communication is a soft

handover communication involving first and second base stations, and the NDI indicates

a decoding result of the data unit taking into account a data unit decoding at the first

base station and a data unit decoding at the second base station.

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